Processes – What are they good for? Absolutely Something!

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- *Tired of being asked to create a process or document just to check a box for an upcoming audit?*

- *Are you creating processes that fall in a black hole never to be looked at again?*

- *Would you like to learn how to create processes that will be used, and users will know how to find, update, and improve the them?*

- *A list of questions to ask, a simple template, and you are on your way to create a process that will be efficient and useful.*

- *Don't waste valuable time trying to decide how to get started on creating your process, only to find out you didn't need one to begin with.*

- *Spend time creating efficient processes that your team will ask for.*

- # Results We Want
  - Produce a consistent product or result
  - Provide guidance
  - Adapt to change
  - Configuration Control
  - Document how we are doing business

- # Reasons for Failure
  - Failed implementation of Process Models, i.e. CMMI, 6 Sigma, etc.
  - Tendency to reward fire fighting
  - Not systematic - randomness creeps in
  - Good processes go unnoticed
  - Process deployment planning
  - Inability to adapt to and keep up with fast track changing environments

- # Process System Design - Getting started
  - Don't get intimidated or overwhelmed
  - Focus on end result
  - Document what you are going to do
    - Example
      - Planning a party – determine the activities to be carried out to complete the task
        - » Decide on theme;
        - » Guest list;
        - » Location;
        - » Menu. etc.
  - Create desk instructions if necessary to help complete task

- # Processes should be evaluated for:
  - ## Necessity
    - Is it necessary or are you just creating a process to check a box? i.e. ISO, CMMI, 6 Sigma, etc.
  - ## Impact
    - Impact on the customer
  - ## Relevance
    - Relevance to overall strategic direction (mission)
  - ## Viability
    - Viability (probability of success – technology risk, management and stakeholder commitment, qualifications and competency of workers = probability of success

- # Responsibilities of Process Owners
  - Determine your audience
  - Ensure proper deployment
  - Monitor effectiveness

- # Process Development Tips
  - – Identify objectives

  - – Identify requirements

  - – Identify change

  - – Identify records being generated

  - – Involve your stakeholders

  - – Create a process that will be used

- # Process Development Tips (con't)
  - – Simple documentation
  - – Don't make to complex
  - – Use lighter colors for printing
  - – Spell out acronyms
  - – Make sure you identify decision blocks
  - – Avoid going in two or more directions
  - – Use notes and text blocks to expand details;
  - – Choose the right format
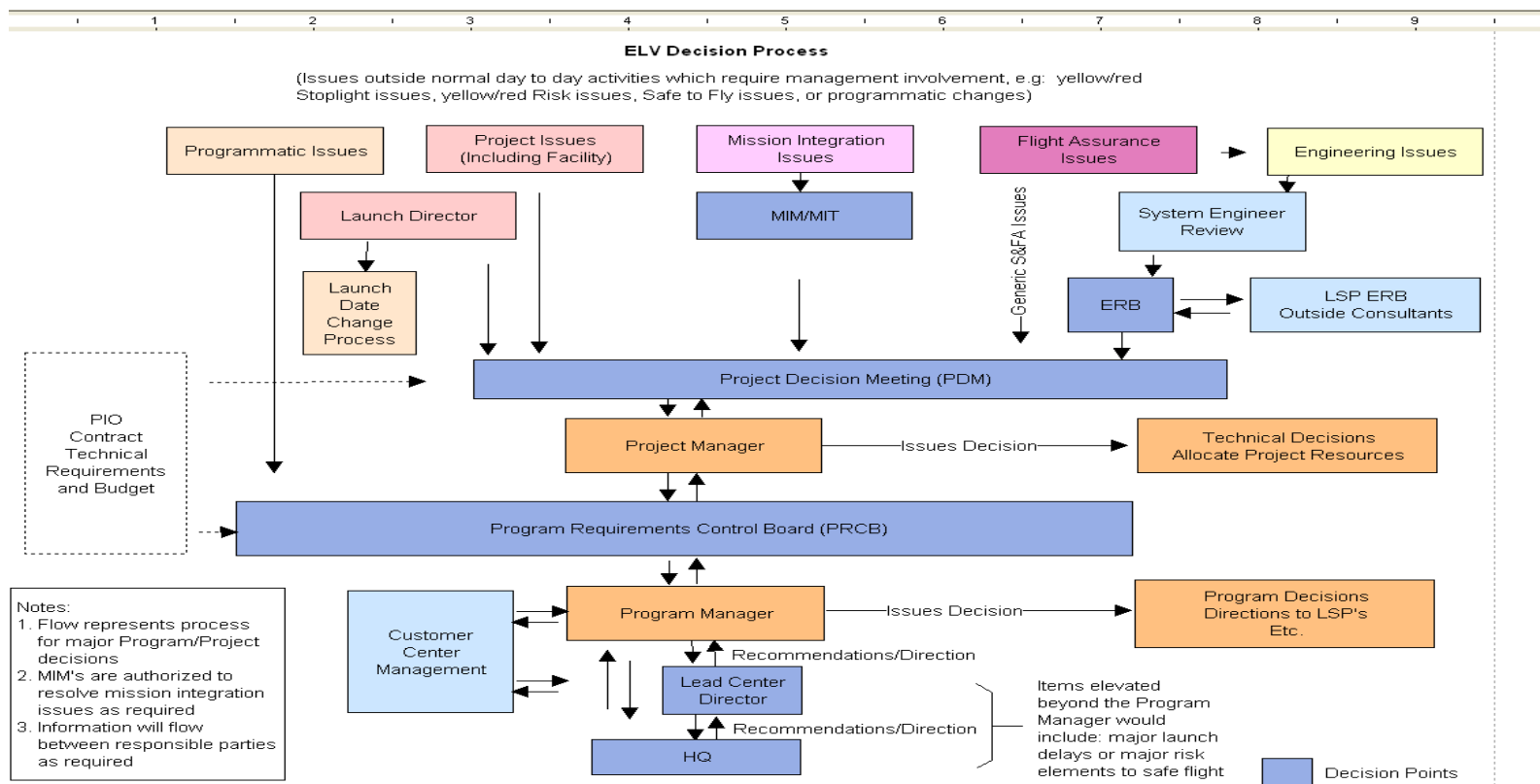 - – Avoid endless loops – no dead ends

Complex Process

ELV Decision Process

(Issues outside normal day to day activities which require management involvement, e.g: yellow/red Stoplight issues, yellow/red Risk issues, Safe to Fly issues, or programmatic changes)

Programmatic Issues | Project Issues (Including Facility) | Mission Integration Issues | Flight Assurance Issues | Engineering Issues

Launch Director

MIM/MIT

System Engineer Review

Generic S&FA Issues

Launch Date Change Process

ERB

LSP ERB Outside Consultants

PIO Contract Technical Requirements and Budget

Project Decision Meeting (PDM)

Project Manager — Issues Decision → Technical Decisions Allocate Project Resources

Program Requirements Control Board (PRCB)

Notes:
1. Flow represents process for major Program/Project decisions
2. MIM's are authorized to resolve mission integration issues as required
3. Information will flow between responsible parties as required

Customer Center Management

Program Manager — Issues Decision → Program Decisions Directions to LSP's Etc.

Recommendations/Direction

Lead Center Director

Items elevated beyond the Program Manager would include: major launch delays or major risk elements to safe flight

Recommendations/Direction

HQ

Decision Points

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Simple Process

Process Template

National Aeronautics and Space Administration
John F. Kennedy Space Center, Florida
Expendable Launch Vehicles Program

LSP-P-411.02
Revision Basic
08/10/05

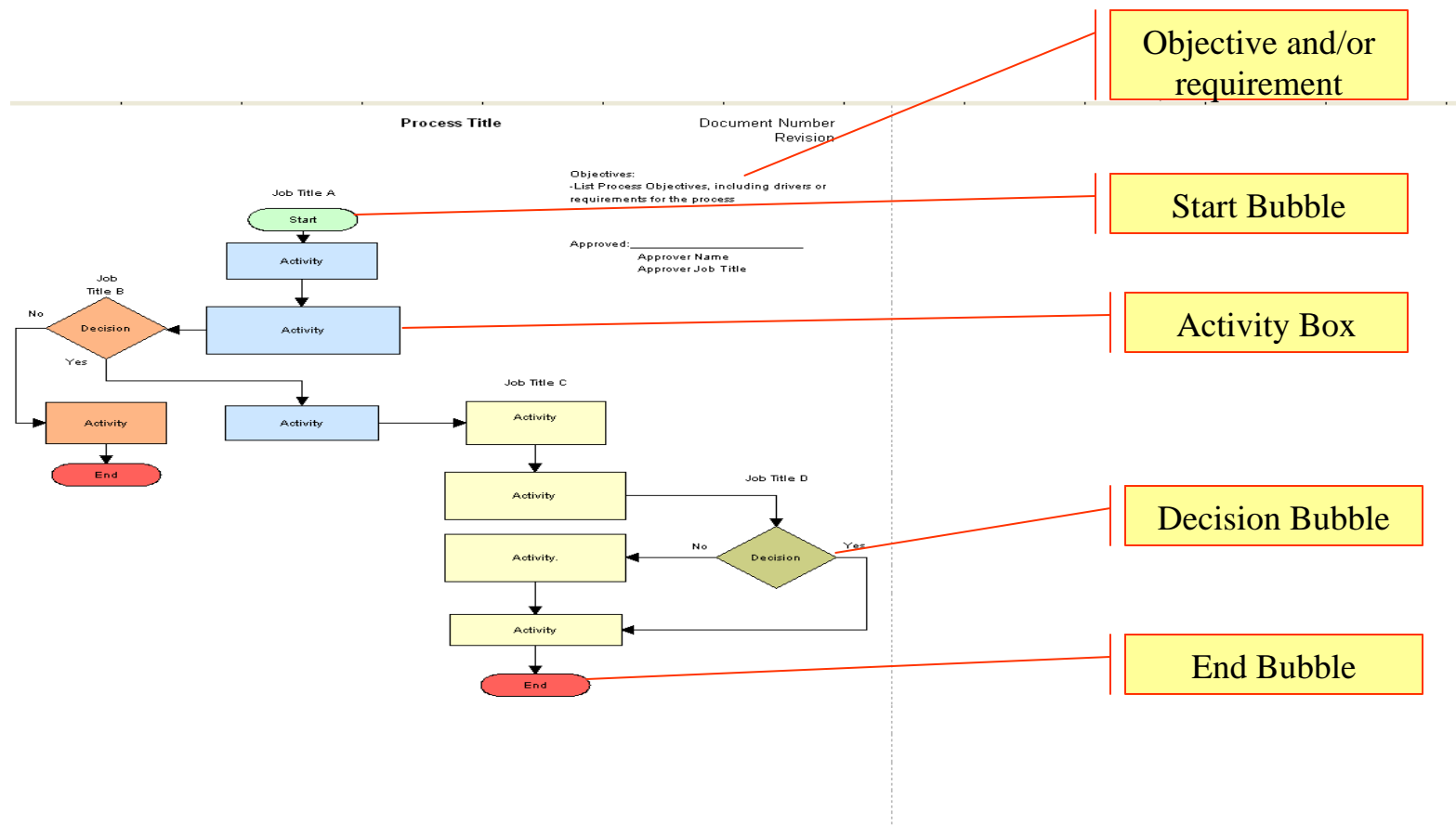**SPACECRAFT CLOSEOUT SHELTER
INSPECTION AND MAINENANCE
PROCEDURE**

Word File

Process Template

Process Title — Document Number / Revision

Objectives:
-List Process Objectives, including drivers or requirements for the process

Approved:_____
Approver Name
Approver Job Title

Job Title A — Start — Activity

Job Title B — Decision — No / Yes — Activity — End

Job Title C — Activity — Activity.

Job Title D — Decision — No / Yes

Objective and/or requirement

Start Bubble

Activity Box

Decision Bubble

End Bubble

Process Template

Document Number
Revision

Process Reference List	
Document Number	Document Title

Reference List

Revision History		
Revision	Description	Date

Revision History

Business Records Generated from Process	
Record Title	Location

Business Records

- # Benefits of Process Improvement
  - ## Better Practices
    - continuous improvement is a Hallmark
  - ## Efficient Methodology
    - to document, review, obtain approval, and revise processes
  - ## Lessons learned
    - Pass on what we learn
    - If we stop learning we will fail

- # People make NASA run – processes help us accomplish it

- ## References
  - ISO 9000 Quality System Development Handbook – David Hoyle
  - Laura Pingston – Quality Management System Manager, Analex Corporation
  - Jim Lichtenthal – Process Modeling Project Manager, John F. Kennedy Space Center

Questions or Comments?